



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,891	03/30/2004	Werner Stamm	1454.1009-CIP	1323
21171	7590	06/06/2006	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			BALDWIN, GORDON	
			ART UNIT	PAPER NUMBER
			1775	

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/811,891

Applicant(s)

STAMM, WERNER

Examiner

Gordon R. Baldwin

Art Unit

1775

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20040811.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 6,11-16,18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Sommer (Pat. No. 6,280,857 B1).

Support for the specific combination of the composition and phase is not considered to have priority date of 4/22/1999. It is noted that none of the priority documents recite the specific combination of 24-26% Co with the other composition limitations. Therefore the claims are afforded a priority date of 3/30/04.

Consider claim 6 and 14, Sommer teaches a protective coating for super-alloy structural parts especially for gas turbine engines (Abstract). The MCrAlY coating is shown to be in the gamma phase. (Claim 7) Additionally, Sommer's teaching of ranges for the composition of the coating encompass the amount of cobalt used as well as the use of nickel and yttrium or lanthanum or lanthanum-series elements and a over-lapping amount of rhenium (Col. 4 Lines 60-67)

Consider claims 11, 12 and 13, Sommer teaches, in column 4 lines 59-68, Chromium from 11-15 wt%, Aluminum from 11.5-14 wt%, Rhenium from 1-8 wt % and Cobalt from 18-28 wt% and Yttrium from 0.3-1.3 wt% and 0-0.5 wt% of a total of Lanthanum or Lanthanum-series.

Consider claim 15, The MCrAlY coating is shown to be in the gamma phase.
(Claim 7)

Consider claim 16, Sommer teaches, in column 4 lines 59-68, Chromium from 11-15 wt%, Aluminum from 11.5-14 wt%, Rhenium from 1-8 wt % and Cobalt from 18-28 wt% and Yttrium from 0.3-1.3 wt% and 0-0.5 wt% of a total of Lanthanum or Lanthanum-series.

Consider claims 18 and 19, Sommer does not teach that its protective layer has chromium-rhenium precipitates; therefore Sommer is considered to not possess the chromium-rhenium precipitates.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 8, 9, 10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sommer (Pat. No.6280857 B1) as applied above, and further in view of Kojima (Pat. No. 5,507,623).

Consider claim 7, while Sommer teaches MCrAlY coating on the proper composition ranges and in the gamma phase (Col. 4 lines 60-67 and Claim 7), Sommer does not teach the use of dual MCrAlY layers in gas turbine components. However, Kojima does teach the use of dual MCrAlY layers in gas turbine components with one layer being laid directly on top of the other. (Col. 4 lines 5-14) It would have been obvious to a person of ordinary skill in the art at the time of invention to have combined the gamma-phase MCrAlY composition of Sommer with the dual layered MCrAlY of Kojima to provide a coating with greater resistance to corrosion and high temperatures. (Kojima Col. 4 lines 1-3)

Consider claim 8, Kojima teaches the use of an inner and outer layer MCrAlY layer (Col. 4 lines 5-14) while Sommer teaches an MCrAlY layer in the gamma phase (Claim 7). However the use of re-melting by electron or ion beams is considered to be a product by process limitation and "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.", (In re Thorpe, 227 USPQ 964,966). Once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between

Art Unit: 1775

the claimed product and the prior art product (*In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983), MPEP 2113).

Consider claim 9, Kojima teaches the use of an inner and outer layer MCrAlY layer (Col. 4 lines 5-14), while Sommer teaches an MCrAlY layer in the gamma phase (Claim 7). However, the use of "electrodeposition" in applying the outer layer is considered to be a product-by-process and "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.", (*In re Thorpe*, 227 USPQ 964,966). Once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product (*In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983), MPEP 2113).

Consider claim 10, Sommer teaches the use of zirconia in a MCrAlY layer. (Col. 7 lines 5-10)

Consider claim 17, Sommer teaches, in column 4 lines 59-68, Chromium from 11-15 wt%, Aluminum from 11.5-14 wt%, Rhenium from 1-8 wt % and Yttrium from 0.3-1.3 wt% and 0-0.5 wt% of a total of Lanthanum or Lanthanum-series. While the chromium and the aluminum do not overlap the wt. percentages of claim 17, they are

Art Unit: 1775

substantially close to that of claim 17 that one of ordinary skill would have expected compositions that are in such close proportions to those in prior art to be prima facie obvious, and to have same properties (*Titanium Metals Corp.*, 227 USPQ 773 (CA FC 1985)).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gordon R. Baldwin whose telephone number is (571)272-5166. The examiner can normally be reached on M-F 7:45-5:15.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on 571-272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GRB


JENNIFER C. MCNEIL
SUPERVISORY PATENT EXAMINER
5/15/06